

**2006**

**Wildfire Season Assessment  
Fire Behavior Potential  
State Preparations  
Accomplishments  
Current Priorities**

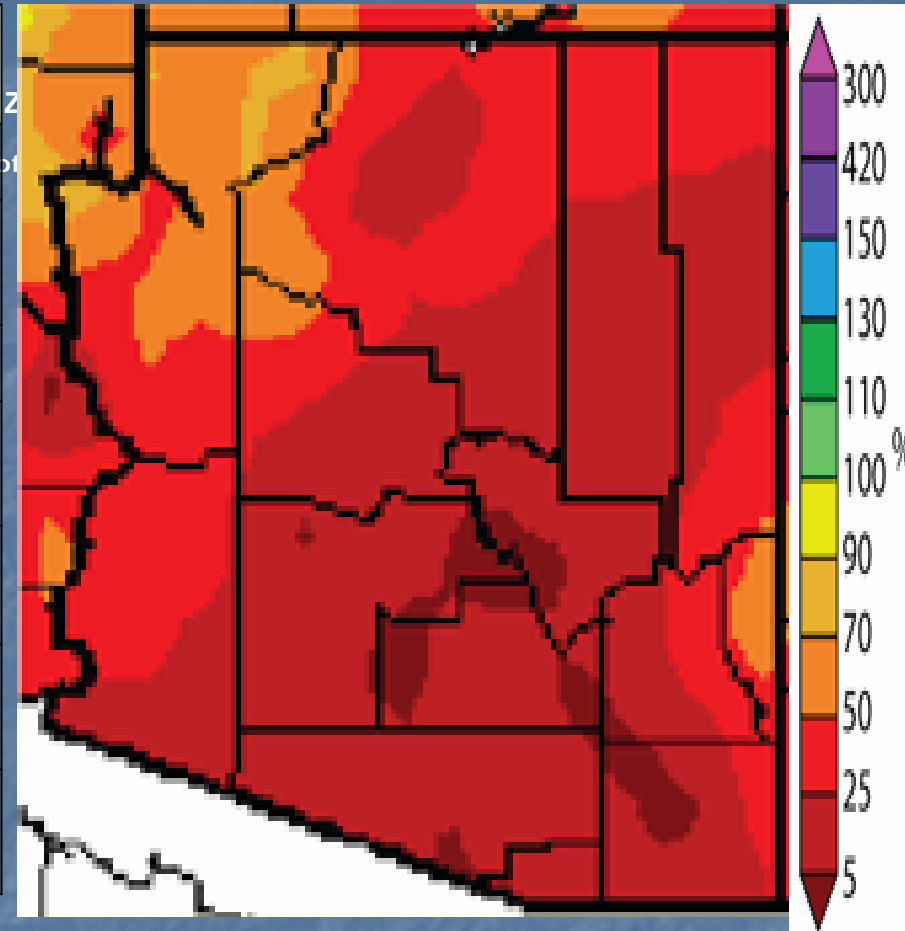
# Better Late Than Never



*Or is it ?*

# It Had Been Dry – Really Dry

Basin	<i>Snow Water Equivalent Percent of Average as of March 5</i>
VERDE RIVER BASIN	0%
SAN FRANCISCO PEAKS	19%
CENTRAL MOGOLLON RIM	0%
LITTLE COLORADO - SOUTHERN HEADWATERS	1%
UPPER SALT RIVER BASIN / WHITE MOUNTAINS	1%
SAN FRANCISCO RIVER BASIN	3%
UPPER GILA RIVER BASIN	5%

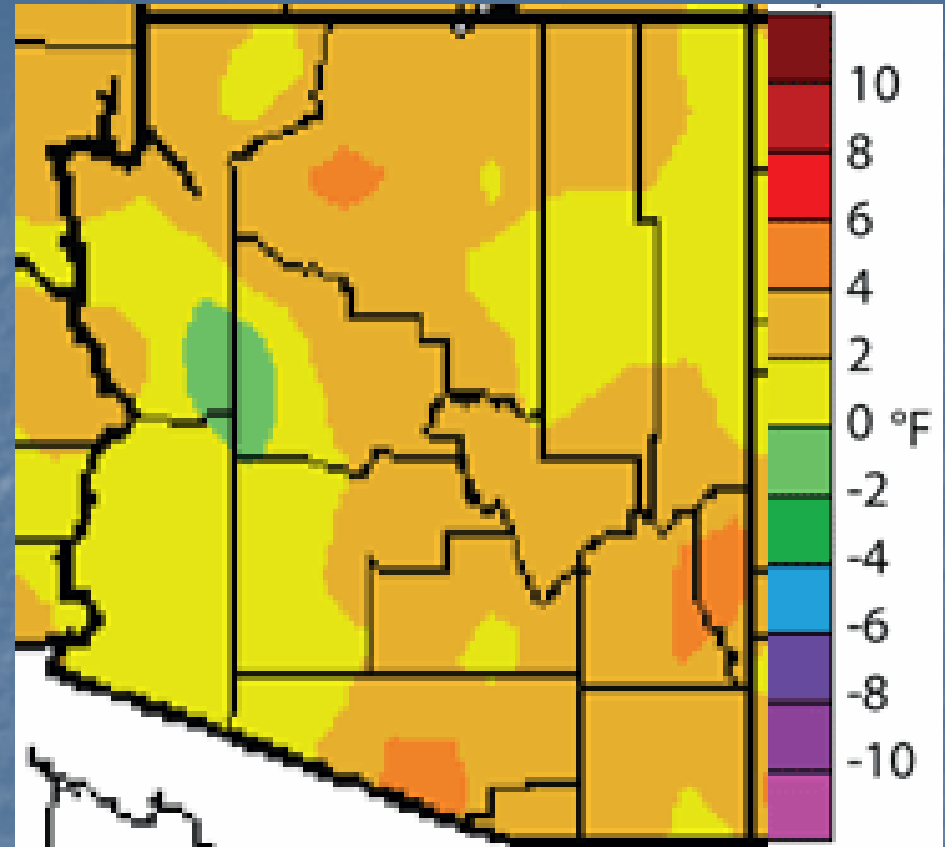
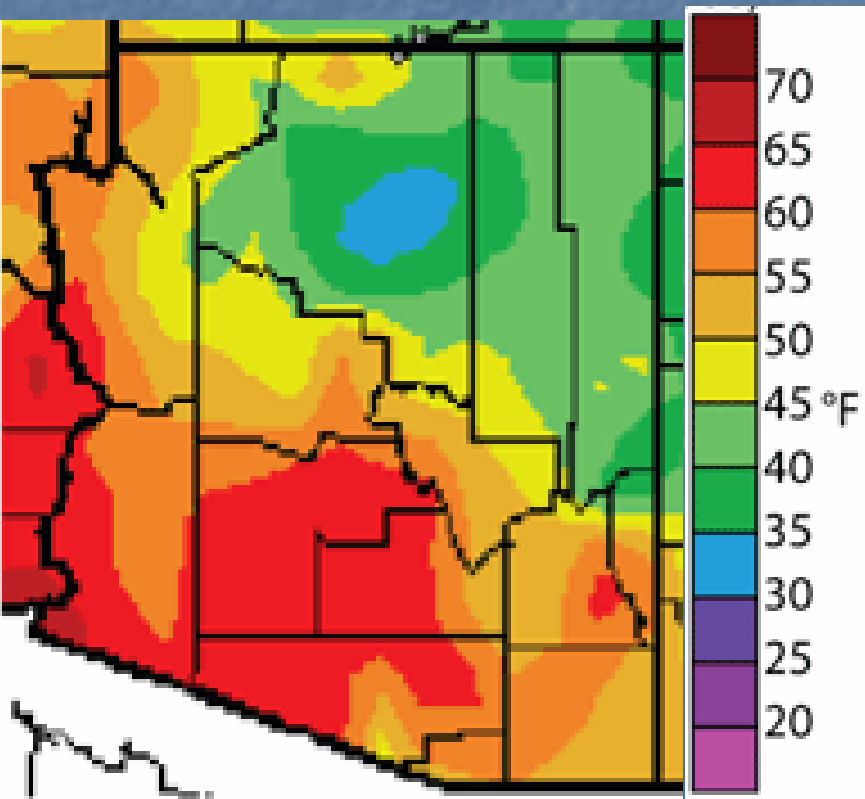


% of Average Precipitation

Oct 1, 2005 – Feb 15, 2006

# And, It's Been Warm – Really Warm

*Average Temperature*



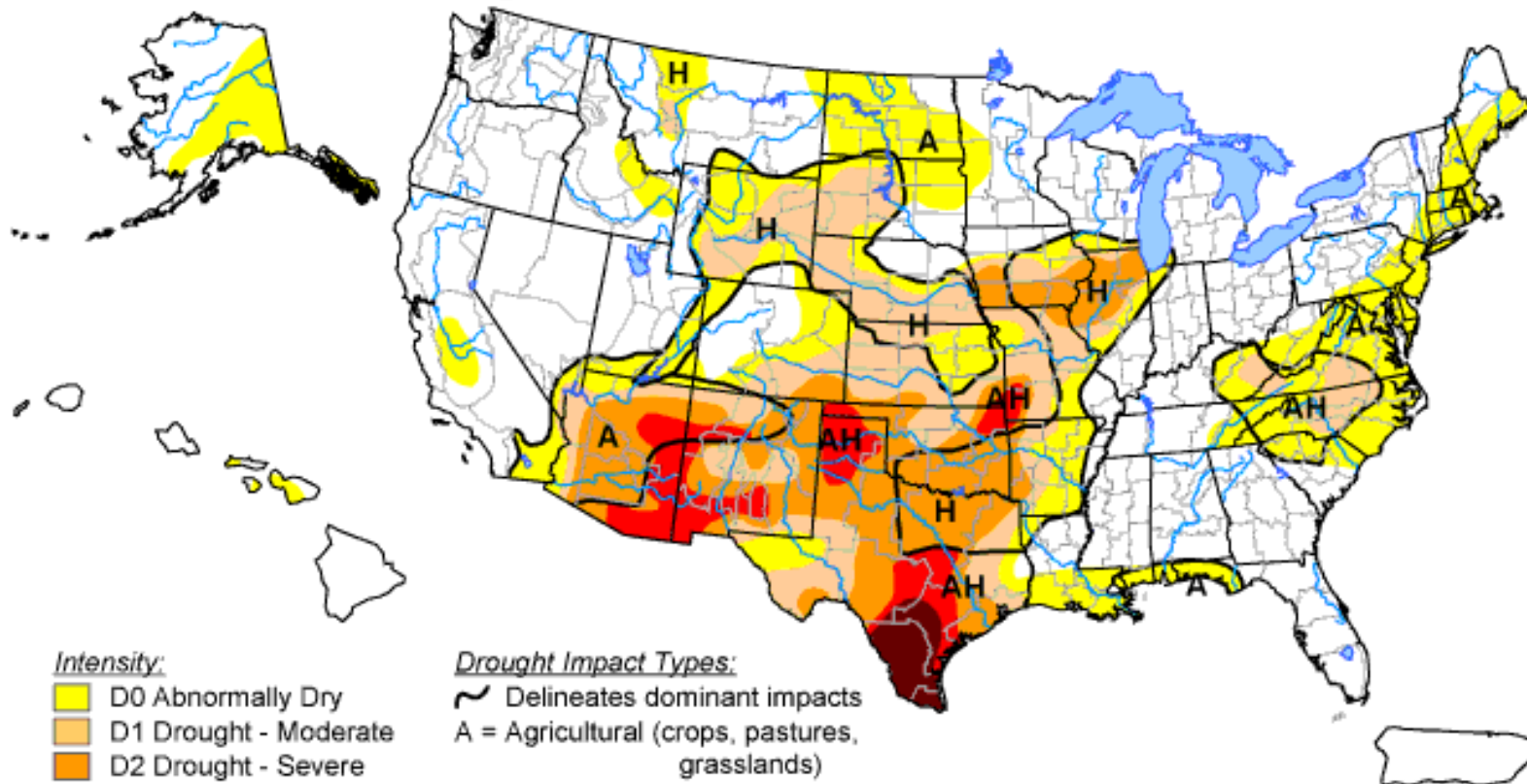
*Departure From Average Temperature*

**Drought** – Moderate to Severe drought conditions existed across almost all of the State with Extreme Drought Conditions in southeast Arizona.

# U.S. Drought Monitor

March 21, 2006

Valid 7 a.m. EST



## Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

## Drought Impact Types:

- Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)
- (No type = Both impacts)

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*



**Released Thursday, March 23, 2006**

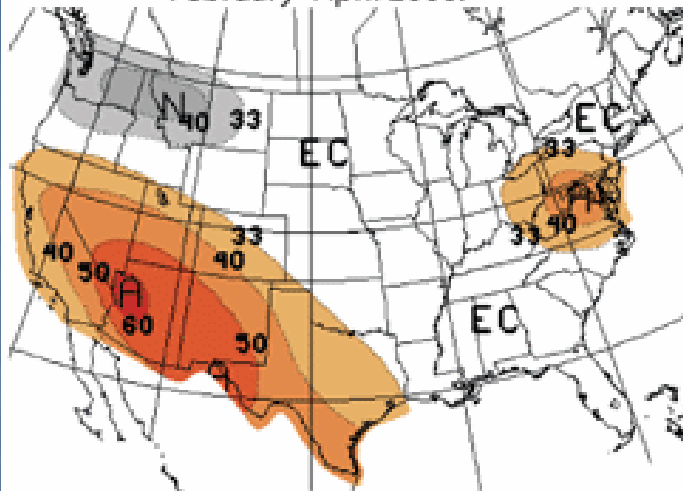
**Author: R. Heim/L. Love-Brotak, NOAA/NESDIS/NCDC**

<http://drought.unl.edu/dm>

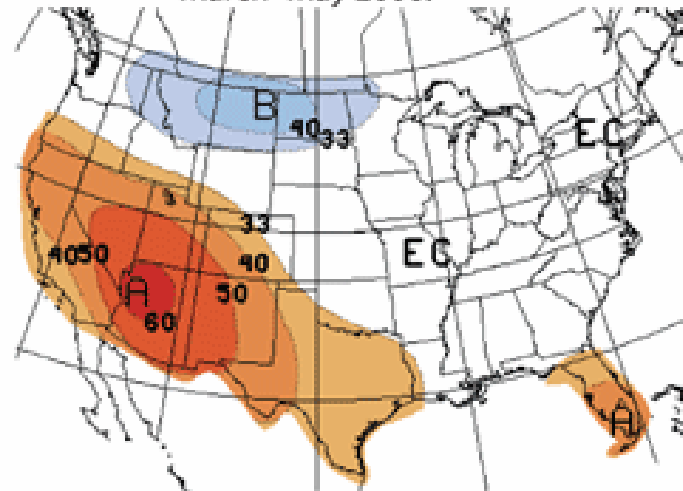


# Temperature Outlook (Through July 2006)

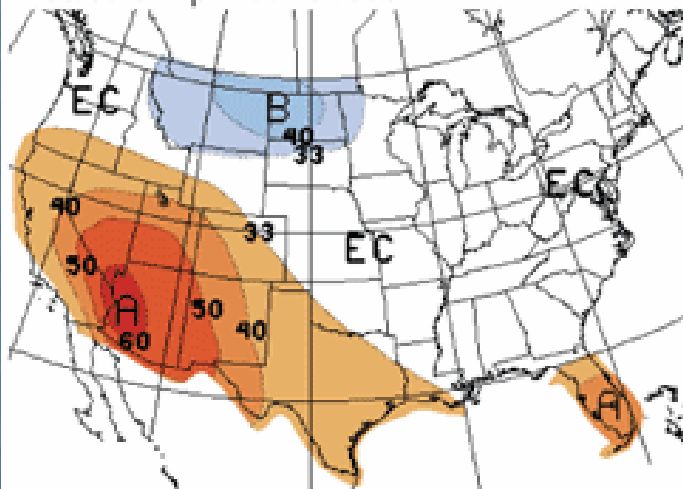
February–April 2006.



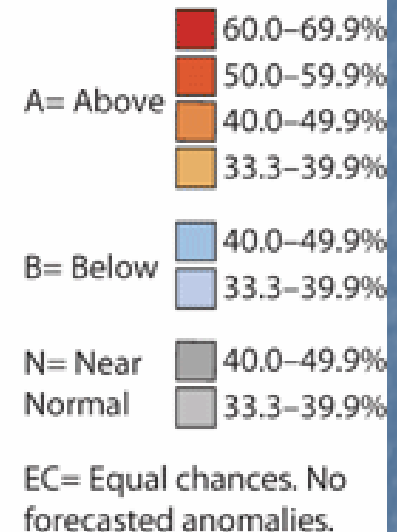
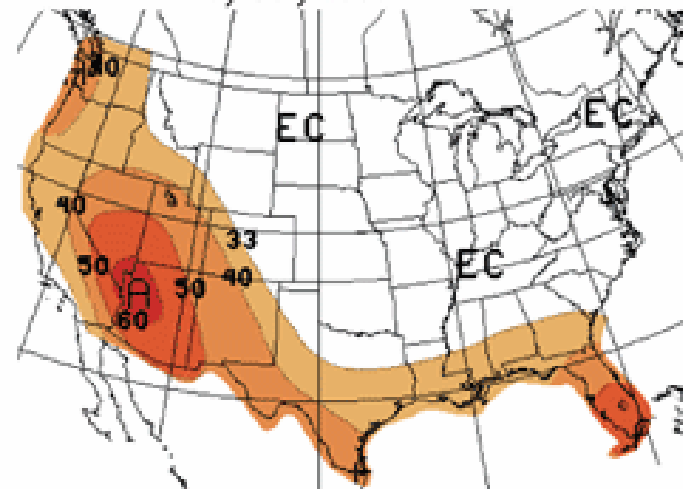
March–May 2006.



April–June 2006.

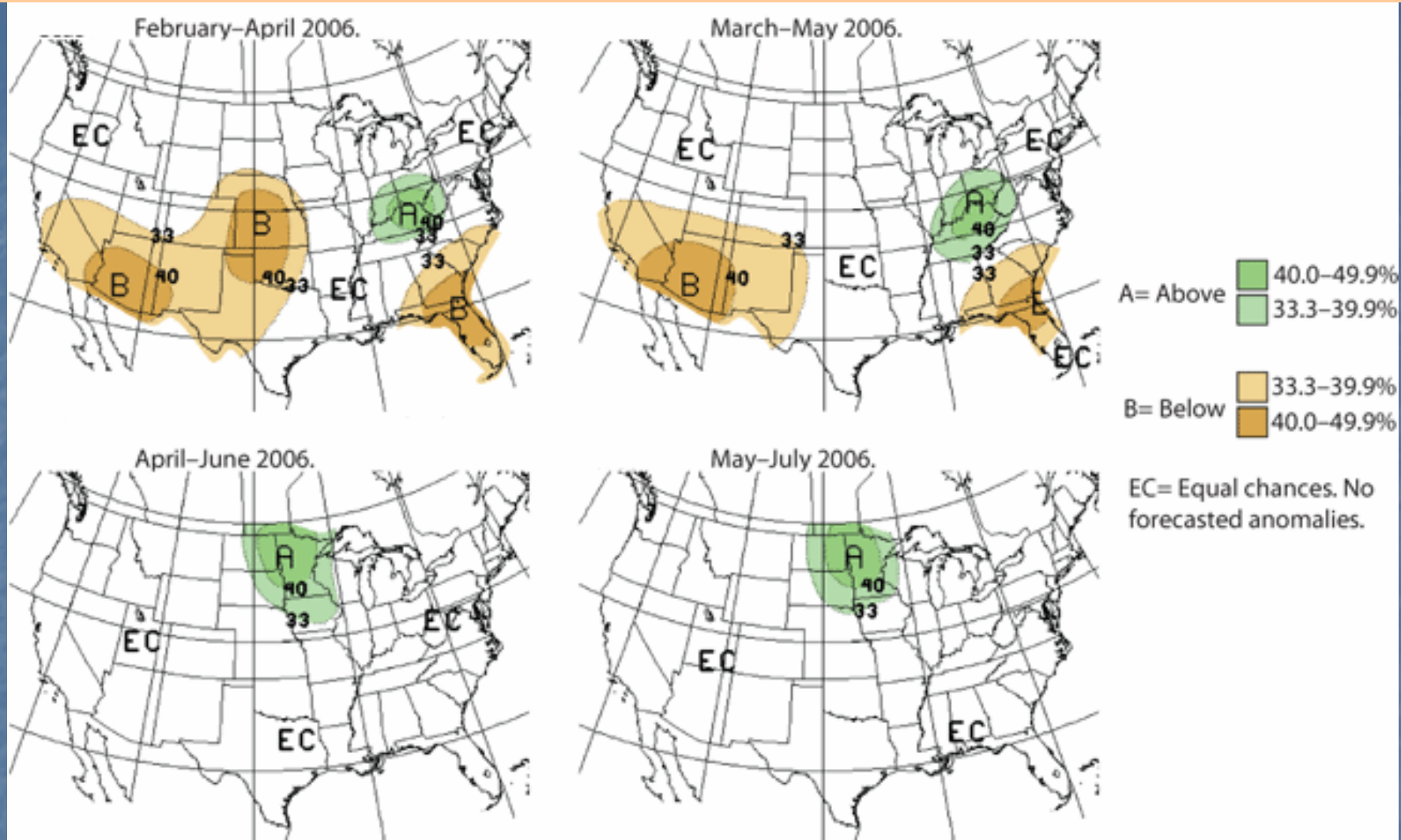


May–July 2006.



**Forecasting Models Predict a Very High Probability (60% to 70%) for Above Normal Temperatures for Most of Arizona through July 2006.**

## Precipitation Outlook (February–July 2006)



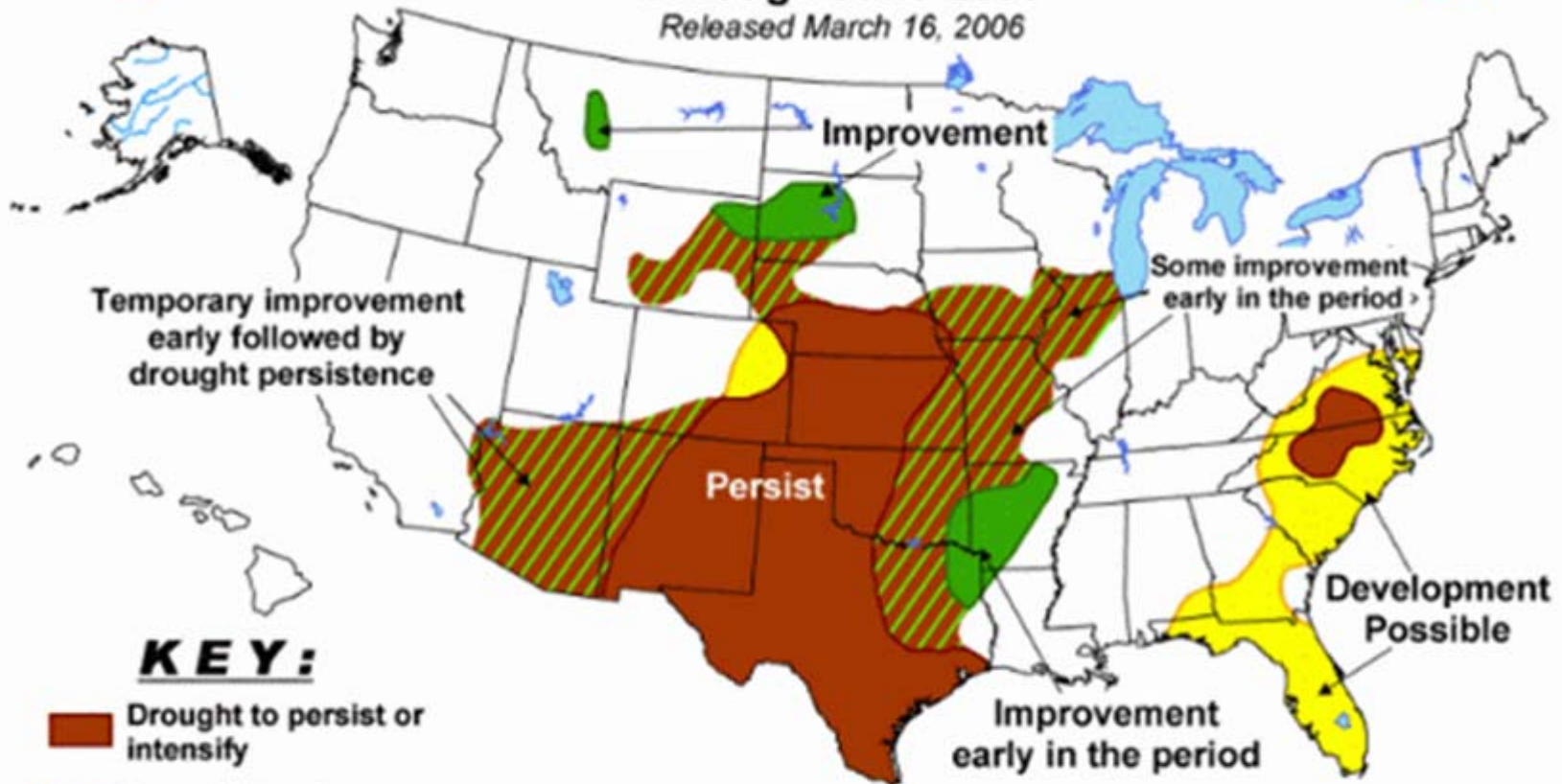
**The Outlook is for Increased Chances of Below Average Precipitation for most Arizona through May 2006. The Models indicate “Equal Chances” for Above or Below or Normal Precipitation during the spring. However, April and May are typically VERY dry.**



# U.S. Seasonal Drought Outlook

Through June 2006

Released March 16, 2006



## KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events – such as individual storms – cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications – such as crops – that can be affected by such events. "Ongoing" drought areas are approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

Outlook calls for Drought to Persist or Intensify over Most Arizona



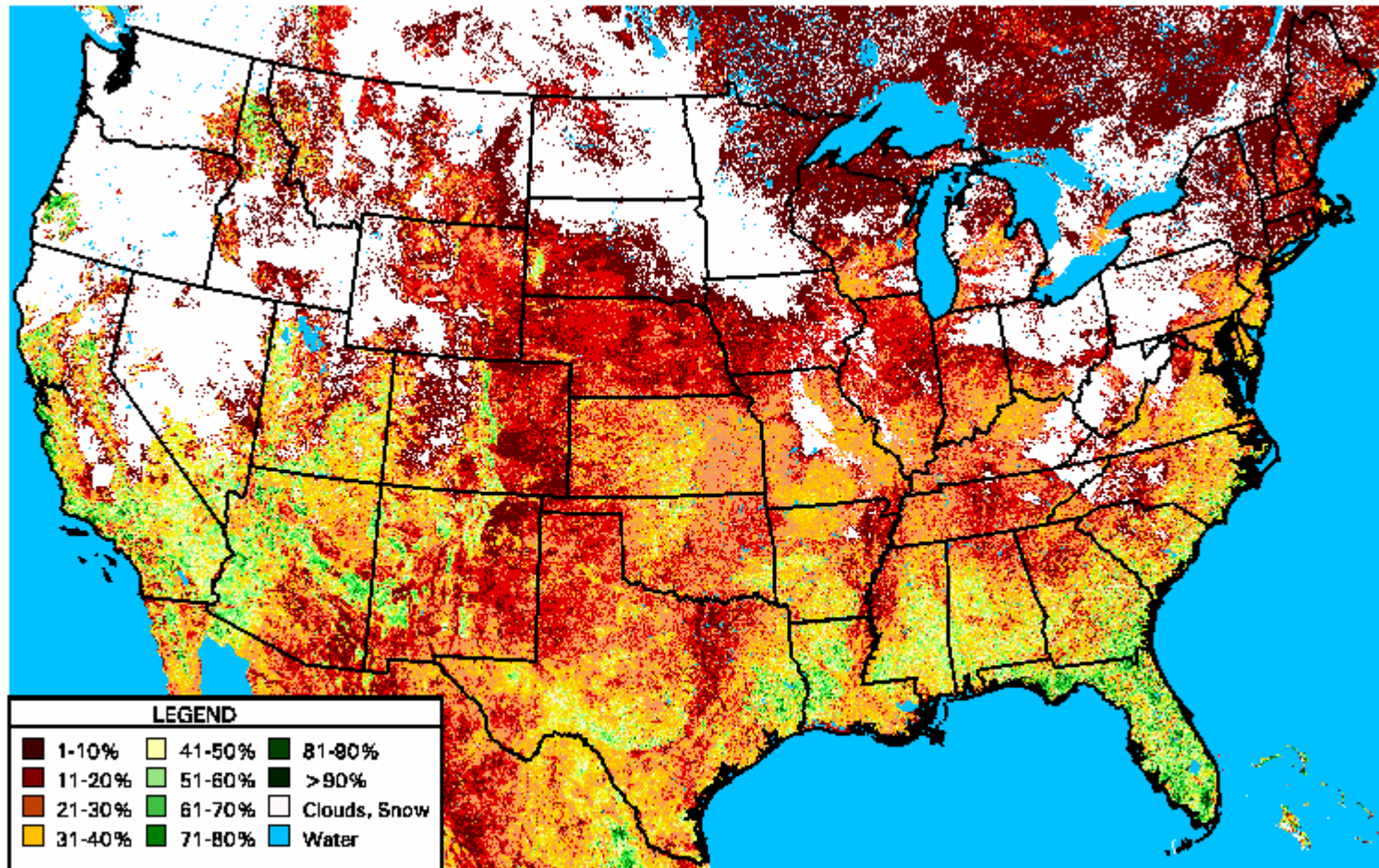


# FIRE FUELS



Relative Greenness:

Jan 04 - Jan 10 2006



**FireLab**  
FIRE RESEARCH

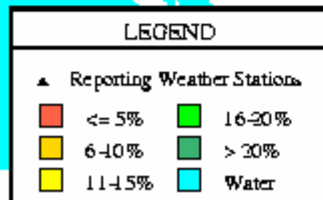
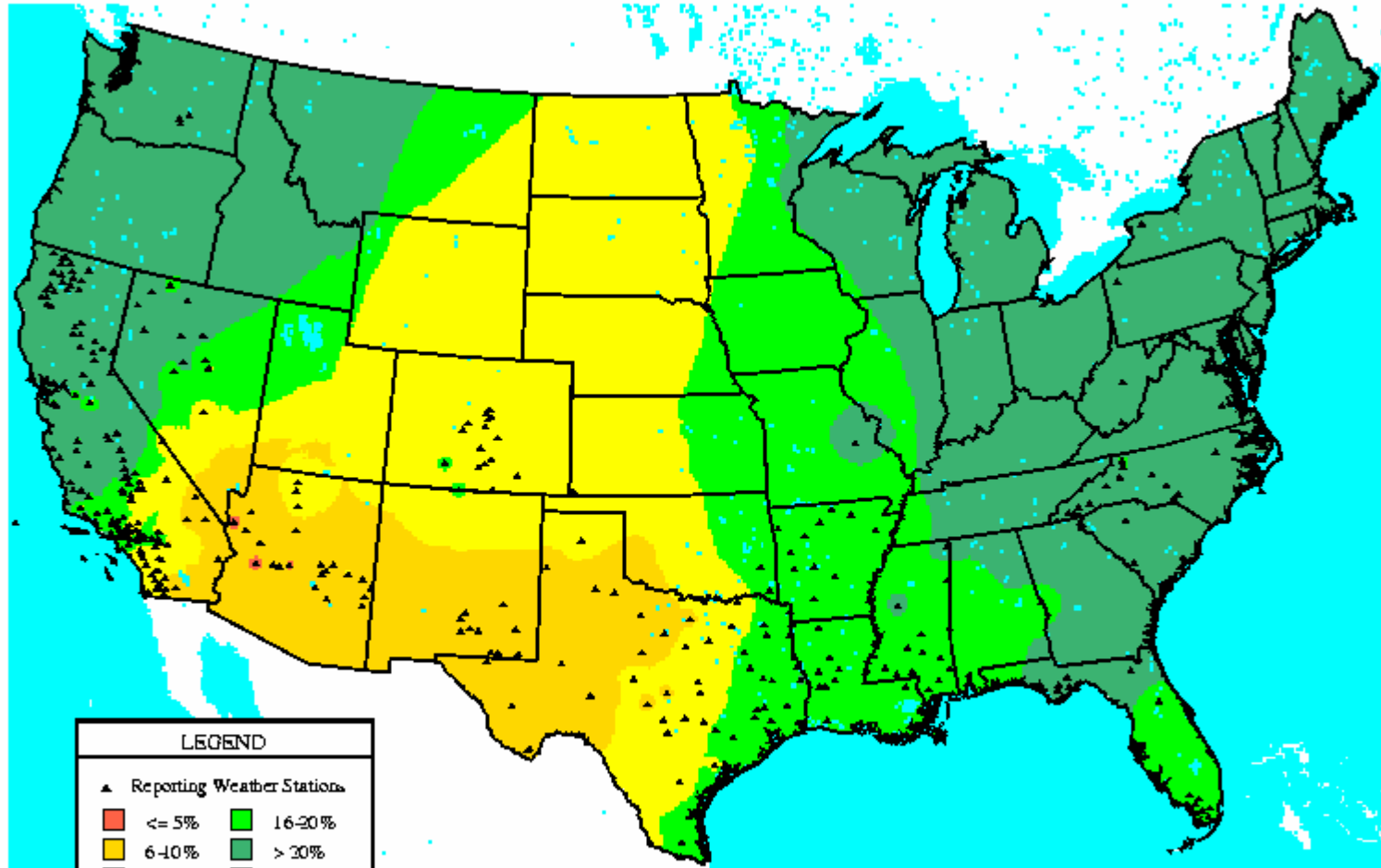
WFAS-MAPS Graphics FIRE BEHAVIOR RESEARCH - MISS

USGS



**Live Fuel Moisture Content Is Well Below Normal For The Winter Months in All Fuel Types. Tree Crowns / Brush Fields Will Not Experience Normal Spring Moisture Recovery**

Obs. 1000-Hour FM: 16-JAN-06



(Inv. Dist.<sup>2</sup> Interp.)

WFAS-MAPS Graphics FIRE BEHAVIOR RESEARCH - MISSOULA, MT



Moisture Content of Dead Fuels Had Been Nearing Normal Summer Values, They Have Not “wetted” and Will Continue to Dry to Extremely Low Values Through The Spring & Summer



# Bark Beetle Mortality

2001- 2004


➤ 25 MM Trees Killed

➤ 2 MM Ac Affected

➤ And they're falling






A photograph of a desert landscape showing the aftermath of a fire. The foreground is a dark, rocky, and barren area, likely the fireline or a recently burned section. In the background, there is a line of green desert shrubs and trees under a blue sky with scattered white clouds.

**2005 Carefree Fire  
Burned Area and Fireline**

A photograph of a desert landscape with unburned fuels. The foreground is covered in tall, dry, yellowish-brown grass. In the background, there are green desert shrubs and trees, and a range of brown mountains under a blue sky with some clouds.

**Unburned Fuels Adjacent to Carefree Fire**

A close-up photograph of unburned fuels. It shows a dense thicket of dry, yellowish-brown grass and green desert shrubs. The sky is a clear, bright blue.

**If it Didn't Burn Last Year, It Could This Year**



**The 2006 fire season still has the potential to be well above normal for number of fires and acres burned.**

**It will likely be characterized by an early and active season in all fuel regimes across most of the State, with above normal potential for ignition and large fire development.**

**The potential for early season timber fires will be particularly high.**



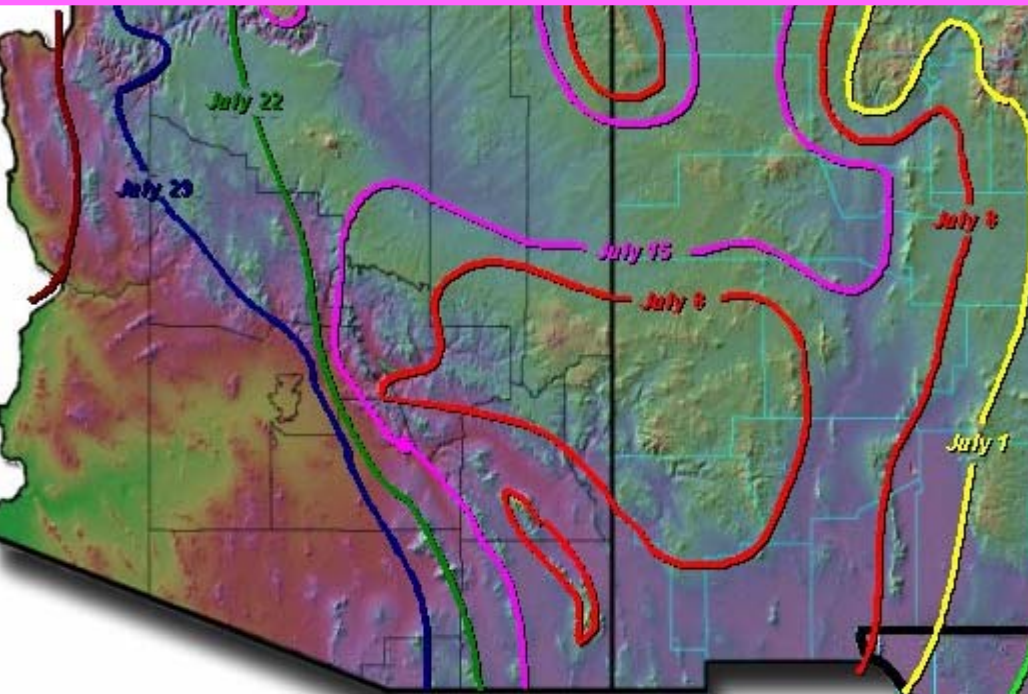


**Fire Season  
*Potential***

**Is Not**

**Fire Season  
*Prediction***

# There Are No PreSeason Indicators About The Timing or Nature Of The Monsoon





60% of Arizona's  
Fires are Started  
By People -

Aggressive Public  
Education and  
Prevention  
Programs May  
Reduce the  
Number of Fire  
Starts This Year.





There is Plenty of  
Time and Support  
Available to  
Homeowners Now  
to Protect Their  
Property From  
Summer Wildfires

# Home & Property Losses Are NOT Inevitable





# State Forestry Preparedness Plans



Single Engine  
Airtankers

National Guard &  
DPS Helicopters



State Engine /  
Prevention Patrols

Out-of-state  
Strike Teams



15 Inmate Fire  
Fuels Crews

Dispatching Upgrades







<b>Federally Contracted Fixed Wing Aircraft</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b><u>Large Airtankers</u></b>	<b>44</b>	<b>33</b>	<b>10 (EOY)</b>	<b>17 (EOY)</b>	<b>16 (6/1/06)</b>
<b>DC-7</b>			<b>1</b>	<b>1</b>	<b>0</b>
<b>P2V</b>			<b>2</b>	<b>9</b>	<b>9</b>
<b>P-3</b>			<b>8</b>	<b>7</b>	<b>7</b>
<b><u>Supplemental A/C</u></b>					
<b>MAFFS</b>	<b>--</b>	<b>---</b>	<b>8</b>	<b>8</b>	<b>4</b>
<b>CL 215 / 415</b>			<b>2</b>	<b>2</b>	<b>2</b>
<b>SEAT</b>	<b>--</b>	<b>---</b>	<b>36</b>	<b>25</b>	<b>22</b>



# Helicopter Resources

## Exclusive Use T-III helicopters

- 10 in SW

## Call-When-Needed T-III helicopters

- 10 in SW

## Exclusive Use T-II helicopters

- 7 nationally, 1 AZ

## Exclusive Use T-I helicopters

- 16 nationally, 1 AZ

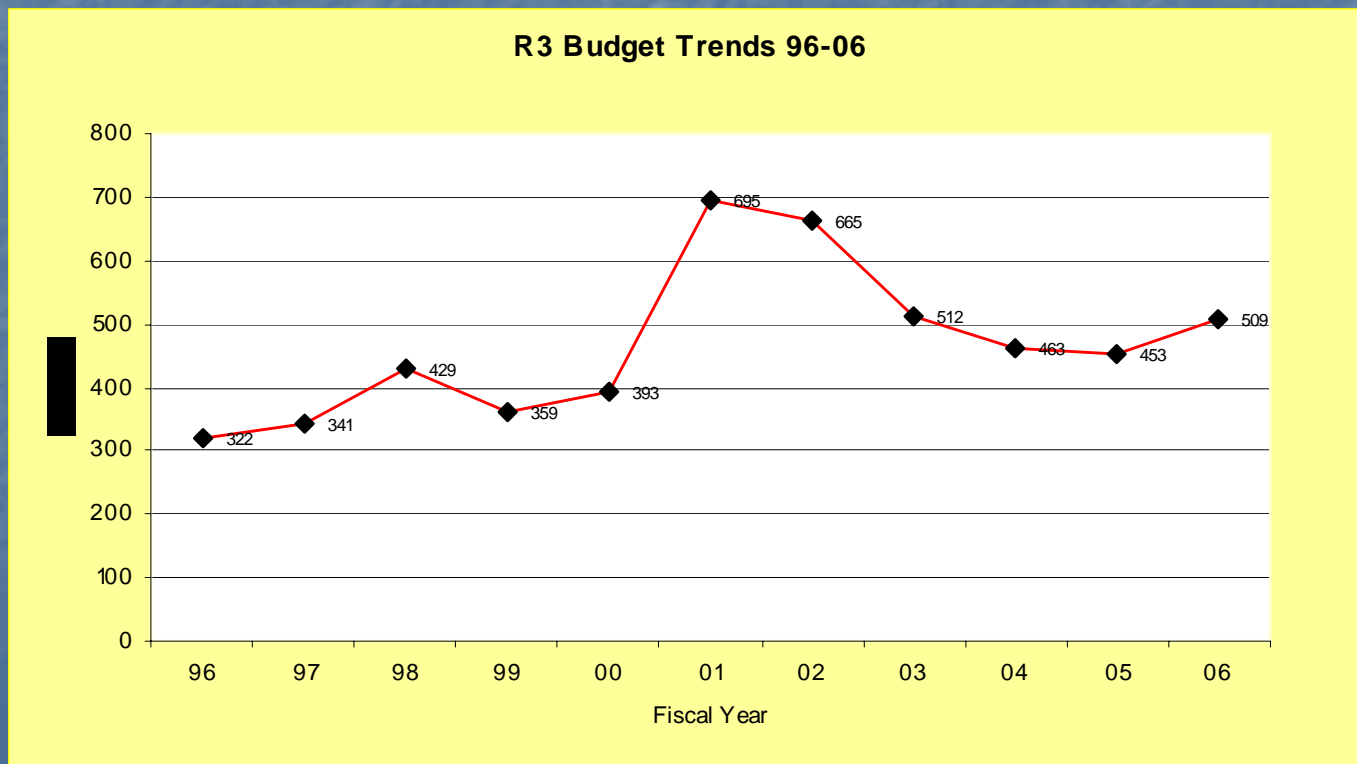
## CWN helicopters

- estimated 50 available nationally in various size categories



# Forest Service R3 2006

- Firefighting capability will be  $\geq$  2005
- Severity requests for additional capability





# EVACUATION PLANNING

## *Wild-land Fire Tabletop Exercise*

*February 28, 2006*

LOCAL:

AUTHORITY

PROCEDURES (ROUTES/SHELTERS)

STATE ASSISTANCE:

LAW ENFORCEMENT

SECURITY

TRANSPORTATION

MASS CARE



# MASS CARE, VOLUNTEER & DONATIONS MANAGEMENT

## AZVOAD





# PRIVATE PARTNERSHIPS

## ✓ UTILITIES



## ✓ TRANSPORTATION



## ✓ COMMUNICATIONS





[www.az211.gov](http://www.az211.gov)

**Statewide Health & Human Resources  
And Emergency Bulletin System**



# *COMMUNICATIONS STRATEGY*

MOBILE COMMUNICATIONS & COMMAND CENTER

MOBILE INTEROPERABILITY COMMUNICATIONS

EMERGENCY MANAGEMENT NETWORK

STATEWIDE MUTUAL AID NET

# *RECOVERY ACTIVITIES*

FAMILY ASSISTANCE SERVICE CENTER  
& COMMUNITY RECOVERY TEAM

RECOVERY OF PUBLIC INFRASTRUCTURE

RECLAMATION / REFORESTATION



# **Contributions and Accomplishments of the Governors' Forest Councils 2000 to Now**



**May 30, 2000 - Governor Hull convened the  
“ AZ/NM Summit – Our Communities and Our Forests at Risk”**

**Arizona’s 1st collaborative “Communities- at-Risk” List**

***Governor’s Forest Health/Fire Plan Advisory Committee***

**Arizona/New Mexico “Regional Ten Year Comprehensive Plan for Reducing  
Wildlife Risk and Restoring Ecosystems**

- Recommend project priorities and confirm funding needs for local community, State, tribal and federal with a roughly \$100 Million Dollar Price tag for Arizona Forests (Federal, State, and Private)**



**March 10, 2003 - Governor Janet Napolitano's  
1<sup>st</sup> Forest Health and Safety Conference “Building on Lessons Learned”**

**1. Arizona Forest Health Advisory Council**

broad cross-section of representation to utilize a science-based approach to improving the health of Arizona's forests.

- Develop guiding principles for the design and implementation of restoration-based fuel reduction and forest health projects based on the best science available;
- Coordinate activities to monitor and evaluate results of existing demonstration restoration projects in Arizona to share lessons learned;
- Evaluate existing and potential sustainable economic uses for small diameter trees;
- Develop incentives for homeowners and homeowner associations for community/neighborhood partnering.

**2. Governor's Forest Health Oversight Council**

Governor's Office, Legislature, state agencies, Forest Health Advisory Council and community at large.

- Serve in oversight role to ensure implementation of Governor's Forest Health and Safety Action Plan. Major Goals of the Action Plan are:
  - Promote Inter-governmental/Inter-agency Coordination
  - Set Priorities for Protecting our Forested Communities
  - Improve Education and Communication
  - Provide Our Communities and Citizens with Much-Needed Tools
  - Work w/ Congressional Delegation to Secure Resources and Develop Sound Policy for Arizona

**March 19, 2004 - Governor Janet Napolitano's  
2nd Annual Forest Conference:  
"The Next 100 Years"**

- examine the progress made over the past year on the recommendations from the conference**
- examine ways to prioritize forest health projects across the landscape;**
- evaluate options to derive economic benefit for rural communities while making healthy forests a priority;**
- develop an action plan for forest health and community protection for 2004.**
- Arizona's Healthy Forest Legislation, House Bill 2549**
  - 6 Companies Certified**
  - 8 Qualified Projects**



March 22, 2005 - Governor Janet Napolitano's  
3rd Annual Forest Conference:  
"Arizona's Forests: Why should we care?"

**GUIDING PRINCIPLES FOR FOREST ECOSYSTEM RESTORATION AND  
COMMUNITY PROTECTION**  
for A New Economy Based on Forest Restoration  
Restoration Economy

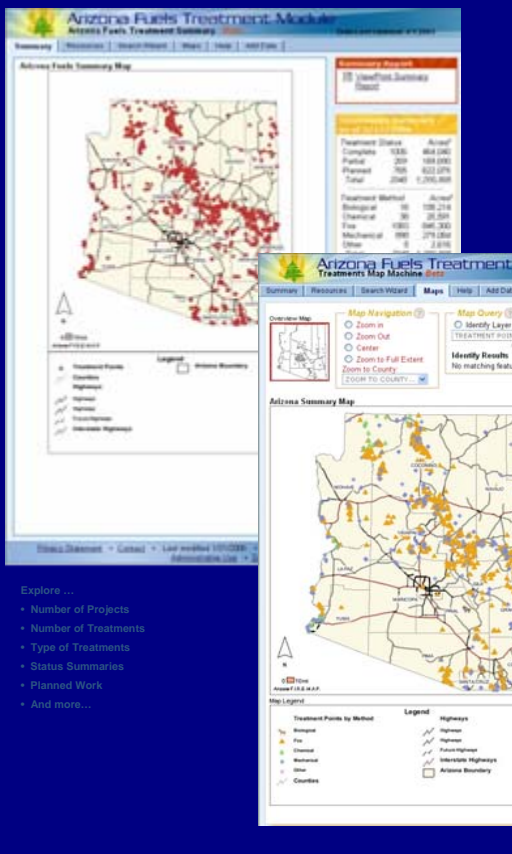
*Arizona Fire Map*  
*A Statewide Standard*  
*Document for Information Technology Projects*

Executive Order 2005-05,  
Renewable Energy/Energy Efficiency  
In new State Buildings

# www.azfiremap.org

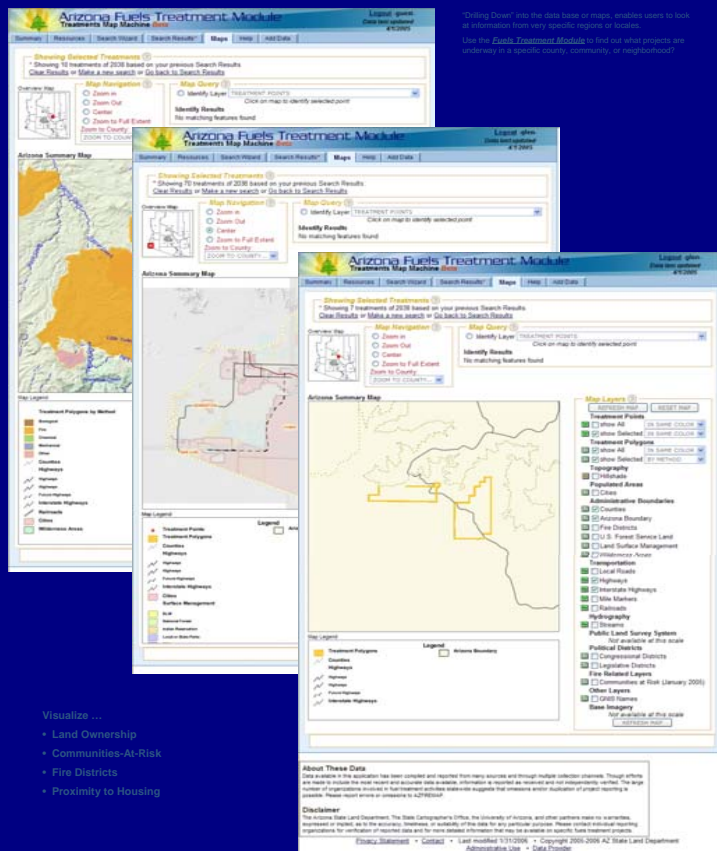
## - Fuels Treatment Module -

### Statewide Overview



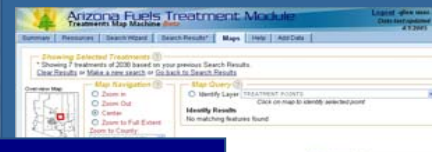
- Explore ...
- Number of Projects
  - Number of Treatments
  - Type of Treatments
  - Status Summary
  - Planned Work
  - And more...

### Local Data



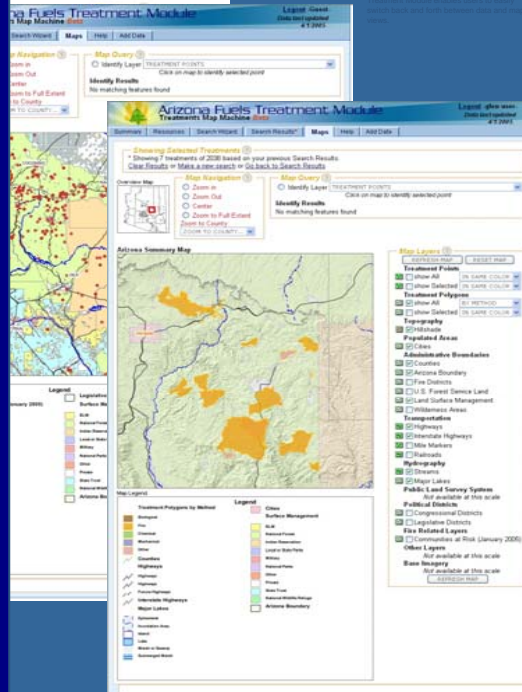
- Visualize ...
- Land Ownership
  - Communities-At-Risk
  - Fire Districts
  - Proximity to Housing

### The Map Machine



The Fuels Treatment Module enables users to view a map of a county, city, town, and county in the state. The Fuels Treatment Module enables users to view a map of a county, city, town, and county in the state. The Fuels Treatment Module enables users to view a map of a county, city, town, and county in the state.

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**About These Data**  
Data in this application has been compiled and reported from many sources and through multiple collection channels. Though efforts are made to ensure the most current and accurate data is displayed, information is reported as received and not independently verified. The large number of organizations involved in fuel treatment activities statewide suggests that resources within individual organizations reporting to this system may vary in accuracy and completeness. These data are provided as a public service and are not intended to be used for legal or regulatory purposes.

**Disclaimer**  
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Arizona State Land Department | State Department of Agriculture | University of Arizona | Arizona State Land Department



March 21, 2006

## Governor Napolitano's 4<sup>th</sup> Annual Forest Health & Safety Conference

### “A Statewide Strategy for Arizona's Forests and Communities: Empowering Place-Based Action”

- Development and Continued Existence of Small-Diameter Utilization Infrastructure
- Emphasize Biomass as a Greater Component of Arizona's Environmental Portfolio Standards Programs
- Inform and Guide the 6 Forest Plan Revisions
- Integrate and Support Community Wildfire Protection Plans
- Serve as a Source of Information and Decision Support for All Stakeholders

# Arizona Community Wildfire Protection Plan (CWPP) Status – February 9, 2006

To date, there have been 11 CWPPs completed within Arizona.

The plan analysis areas encompass over 7 million acres of federal, state, tribal, and private land.

71 of the state's 159 identified Communities At Risk (CAR) fall within these completed plans.

The completed plans include:

## Graham County

Approximate Acres: 2,975,000  
Communities At Risk: 4

## Greater Williams Area

Approximate Acres: 326,000  
Communities At Risk: 3\*

## Mogollon Rim

Approximate Acres: 290,000  
Communities At Risk: 31

## Northern Apache County

Approximate Acres: 498,000  
Communities At Risk: 5

## Sitgreaves National Forest

Approximate Acres: 960,000  
Communities At Risk: 11

## Yavapai Communities

Approximate Acres: 960,000  
Communities At Risk: 8

## Greater Flagstaff Area

Approximate Acres: 923,000  
Communities At Risk: 8

## Greenlee County

Approximate Acres: 1,175,000  
Communities At Risk: 0

## Mount Lemmon

Approximate Acres: 8,000  
Communities At Risk: 1

## Palominas

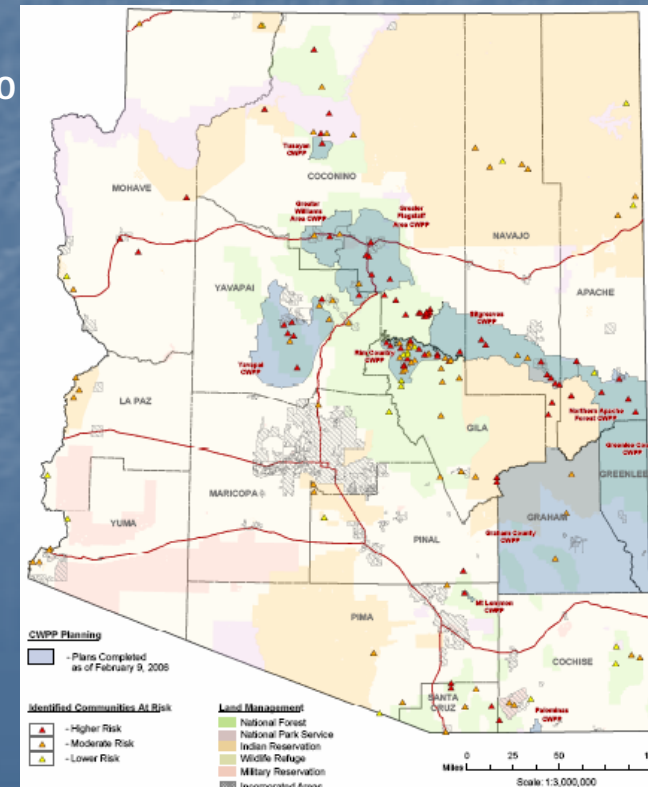
Approximate Acres: 17,000  
Communities At Risk: 0

## Tusayan

Approximate Acres: 64,000  
Communities At Risk: 1

## Planning Areas In Process

Cascabel  
Blue Ridge





Federal Fuels Treatment Totals for Arizona

(As of 3/8/2006)	FFY03	FFY04	FFY05			FFY06				FFY07			5 Yr Total
	Reported Accomplishments			(3 Yr total)		YTD	Total Planned			Reported Planned			Actual and Planned
DOI Acres	118,867	98,261	122,015		339,143		21,945	99,230		45,051			483,424
PlndCosts (\$ Mil)	\$12.0	\$11.0	\$8.6		\$31.6			\$5.8		\$3.3			\$40.7
FS Acres	67,061	130,447	156,422		353,930		61,215	94,720		46,965			495,615
PlndCosts (\$ Mil)	\$8.4	\$18.7	\$15.9		\$43.0			\$10.5		\$6.6			\$60.1
Total Acres	185,948	228,738	278,462		693,148		83,160	193,966		92,026			979,140
PlndCosts (\$ Mil)	\$20.4	\$29.7	\$24.5		\$74.6			\$16.3		\$9.9			\$100.8

## Summary of State Fire Assistance Accomplishments

<u>Year</u>	<u>Plans</u>	<u>Programs</u>	<u>Fuels Projects</u>	<u>Acres Treated</u>	<u>Homes Protected</u>
2001	773	126	117	4,789	2,281
2002	60	78	24	6,537	1,095
2003	48	21	19	9,092	2,567
2004	32	10	18	2,307	889
2005	15	1	4	140	84
5-Yr	928	236	182	22,865	6,916

\$ 14,317,707 Provided by State and Federal Grants

\$ 26,387,090 With Community Match

2006 Planned Accomplishments: 18 Projects / 5,934 Acres / \$ 4,090,000



# Forest Health Restoration Grants

- 2003 – 2 Grants - \$ 161,000
- 2004 – 3 Grants - \$ 1,000,000
- 2005 – 4 Grants - \$ 675,000
- 3Year – 9 Grants - \$ 1,836,000

## Summary of Rural and Volunteer Fire Assistance

<u>Year</u>	<u>#of Projects</u>	<u>Dollars Provided</u>
2001	65	\$ 678,500
2002	63	\$ 715,000
2003	54	\$ 298,000
2004	66	\$ 892,000
2005	59	\$ 896,000
5 Yr	307	\$ 3,961,500



# **FIREWISE**

## **and Other Public Education Activities**

### **8 Firewise Recognized Communities**

- Timber Ridge,
- Forest Highlands,
- Mt. Lemmon,
- Palominas
- Retreat @ Walnut Creek
- Oracle
- Groom Creek
- Highland Pines

500,000 Firewise Brochures Distributed in 2004

300,000 Updated Brouchures Distributed in 2005

197 Workshops in last 5 Years

Governor's and Black Canyon City Firewise PSAs

Billy Brush Wacker CD for Pine/Strawberry

Community Firewise Awareness Days

Groom Creek

Arivaca

Black Canyon City

# Questions ?

Answers:

[www.azstatefire.org](http://www.azstatefire.org)